

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 6,758,975 B2
APPLICATION NO. : 10/075175
DATED : July 6, 2004
INVENTOR(S) : Alan M. Peabody et al.

Page 1 of 8

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

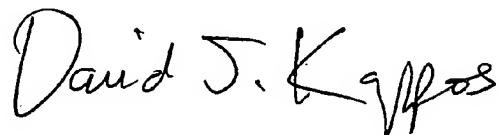
Delete title page showing an illustrative figure and substitute the attached title page therefor.

Insert drawing sheets containing figures 6-9.

Figures 6, 7, 8A, 8B, 8C, and 9, filed with the original application papers, were not printed in the patent, U.S. Patent No. 6,758,975 B2. Only Figures 1, 1A, 1B, 1C, 2, 3, 4, and 5, appear in the printed patent.

Signed and Sealed this

Thirty-first Day of August, 2010



David J. Kappos
Director of the United States Patent and Trademark Office

(12) **United States Patent**
Peabody et al.(10) Patent No.: **US 6,758,975 B2**
(45) Date of Patent: **Jul. 6, 2004**(54) **AUTOMATED PERITONEAL DIALYSIS SYSTEM AND PROCESS WITH IN-LINE STERILIZATION OF DIALYSATE**(75) Inventors: **Alan M. Peabody**, Greenville, SC (US); **Jeffrey J. Shimon**, Mountain View, CA (US); **Joel Frederic Jensen**, Redwood City, CA (US)(73) Assignee: **Piedmont Renal Clinic, PA**, Greenville, SC (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 89 days.

(21) Appl. No.: **10/075,175**(22) Filed: **Feb. 14, 2002**(65) **Prior Publication Data**

US 2002/0162778 A1 Nov. 7, 2002

Related U.S. Application Data

(60) Provisional application No. 60/269,570, filed on Feb. 16, 2001.

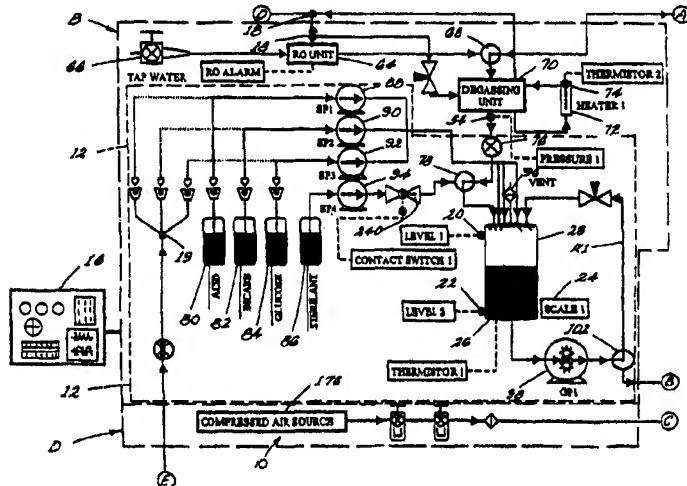
(51) **Int. Cl.** ⁷ **B01D 65/02**(52) **U.S. Cl.** **210/645; 73/38; 73/40; 210/85; 210/90; 210/257.2; 210/321.69; 210/739; 210/741; 604/29; 604/65**(58) **Field of Search** **210/85, 90, 97, 210/106, 108, 257.2, 258, 321.69, 321.71, 636, 645-647, 739, 741, 744; 73/38, 40, 40.5 R, 40.7; 134/22.1, 22.11, 22.12, 56 R; 604/29-31, 65, 4.01, 5.01**(56) **References Cited****U.S. PATENT DOCUMENTS**3,825,493 A 7/1974 Brown et al. 210/23
4,239,041 A 12/1980 Popovich et al. 128/213

4,311,587 A	1/1982	Nose et al.	.....	210/136
4,311,687 A	1/1982	Hertl et al.	.....	210/136
4,586,920 A	5/1986	Peabody	.....	604/29
4,718,890 A	1/1988	Peabody	.....	604/29
4,747,822 A	5/1988	Peabody	.....	604/29
5,004,459 A	4/1991	Peabody et al.	.....	604/29
5,643,201 A	7/1997	Peabody et al.	.....	604/31
5,683,584 A	11/1997	Wenthold et al.	.....	210/500
5,808,181 A	* 9/1998	Wamsiedler et al.	.....	73/38
5,827,820 A	* 10/1998	duMoulin et al.	.....	514/2
5,925,011 A	* 7/1999	Faict et al.	.....	604/29
5,944,684 A	8/1999	Roberts et al.	.....	604/5
6,074,559 A	6/2000	Hahmann et al.	.....	210/645
6,254,567 B1	* 7/2001	Treu et al.	.....	604/29
6,280,632 B1	* 8/2001	Polaschegg	.....	210/739
6,635,179 B1	* 10/2003	Summerton et al.	.....	210/650

* cited by examiner

Primary Examiner—Joseph Drodge(74) **Attorney, Agent, or Firm**—McNair Law Firm, PA; Cort Flint(57) **ABSTRACT**

An automated peritoneal dialysis system for performing continuous peritoneal dialysis is disclosed which includes a fluid circuit for delivering unsterilized dialysate from an uninterrupted supply, and a dialysate sterilization component having at least one in-line sterilization filter assembly disposed in the inflow line segment for realtime sterilization of the unsterilized dialysate during flow prior to patient delivery. A filter test component is operatively associated with the sterilization filter assembly for conducting a real-time integrity test on the filter assembly to test for a filter failure which would allow contaminants into the dialysate prior to patient delivery. If the filter fails the test, the fluid is discarded. In this manner, sterilization of fluid in realtime during a peritoneal dialysis process provides a high rate of dialysate exchange during repeated dialysate fill and drain cycles.

64 Claims, 12 Drawing Sheets

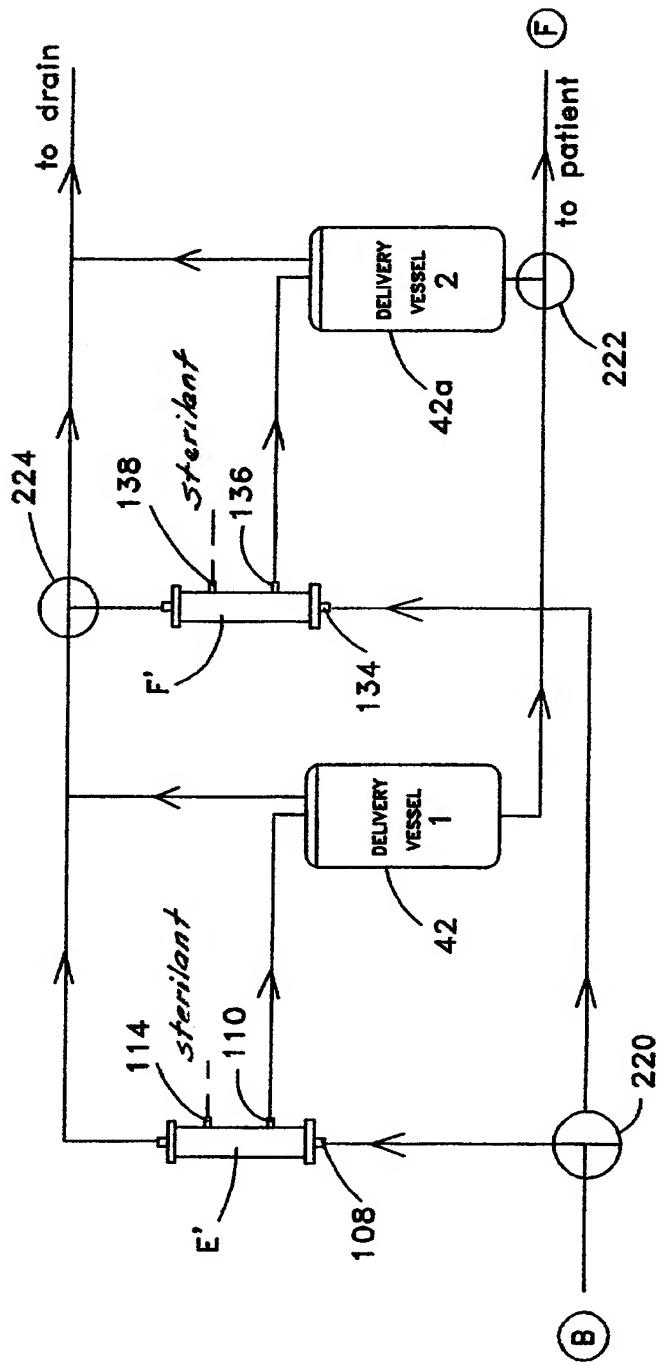


Fig. 6

U.S. Patent

Jul. 6, 2004

Sheet 8 of 12

6,758,975 B2

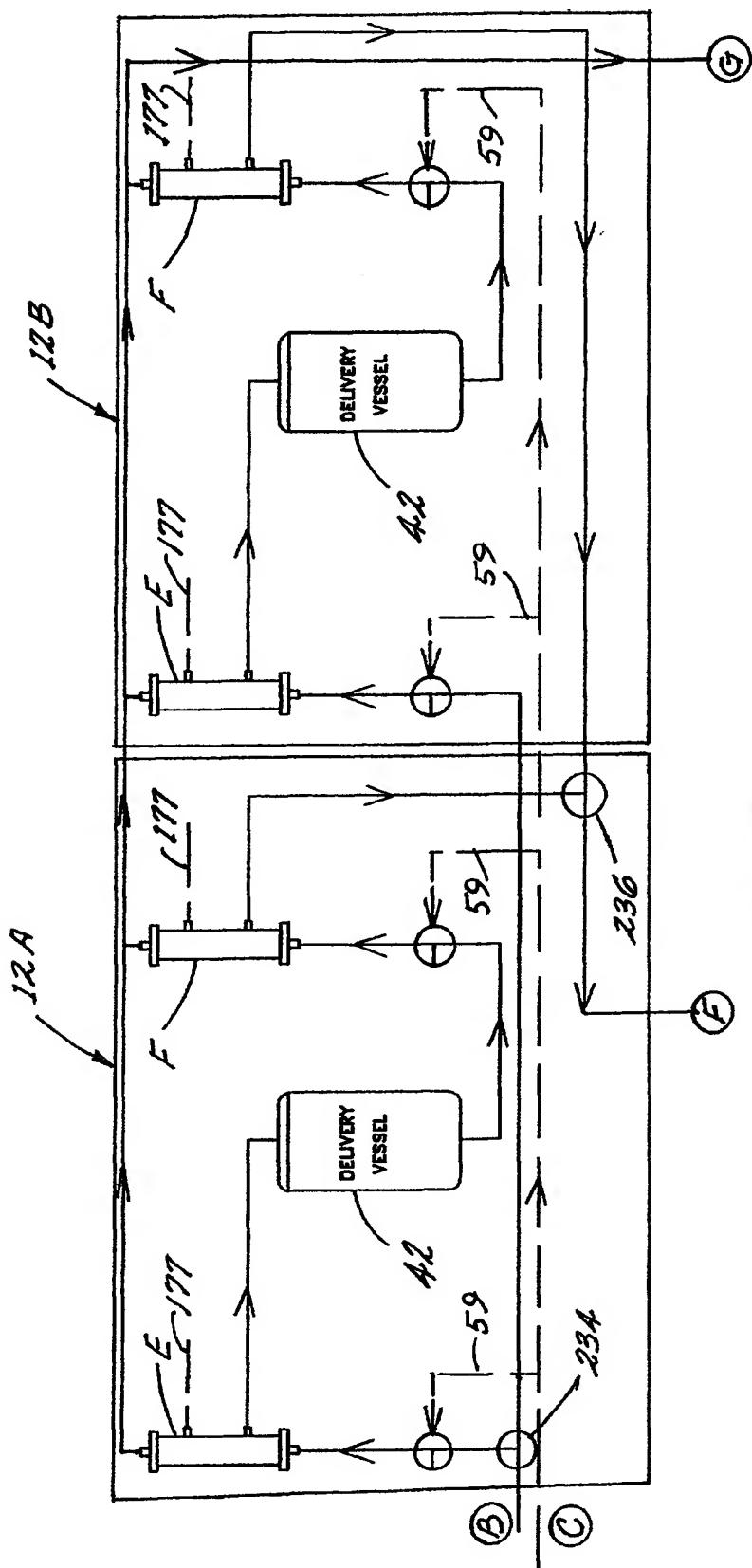


Fig. 7

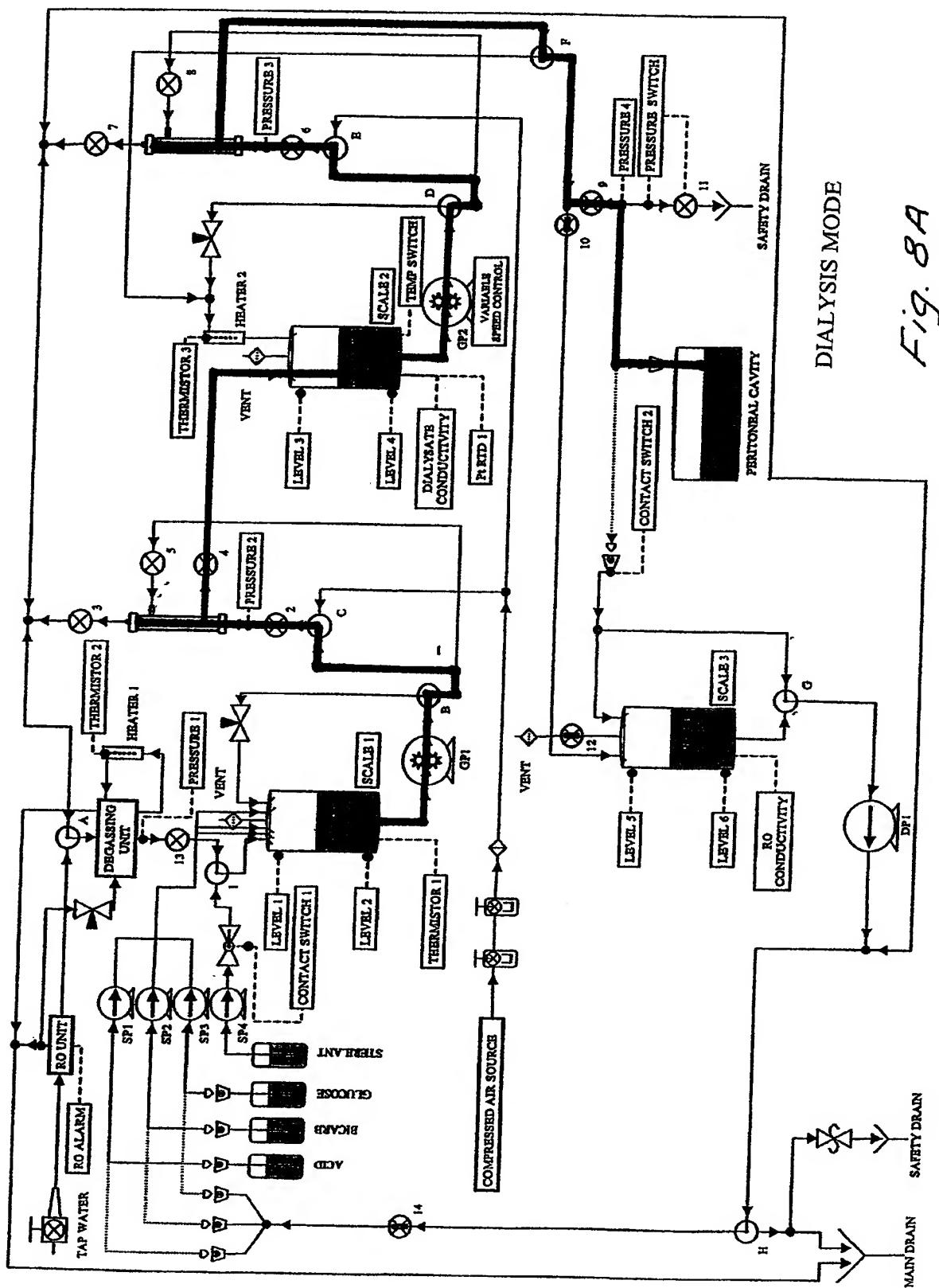
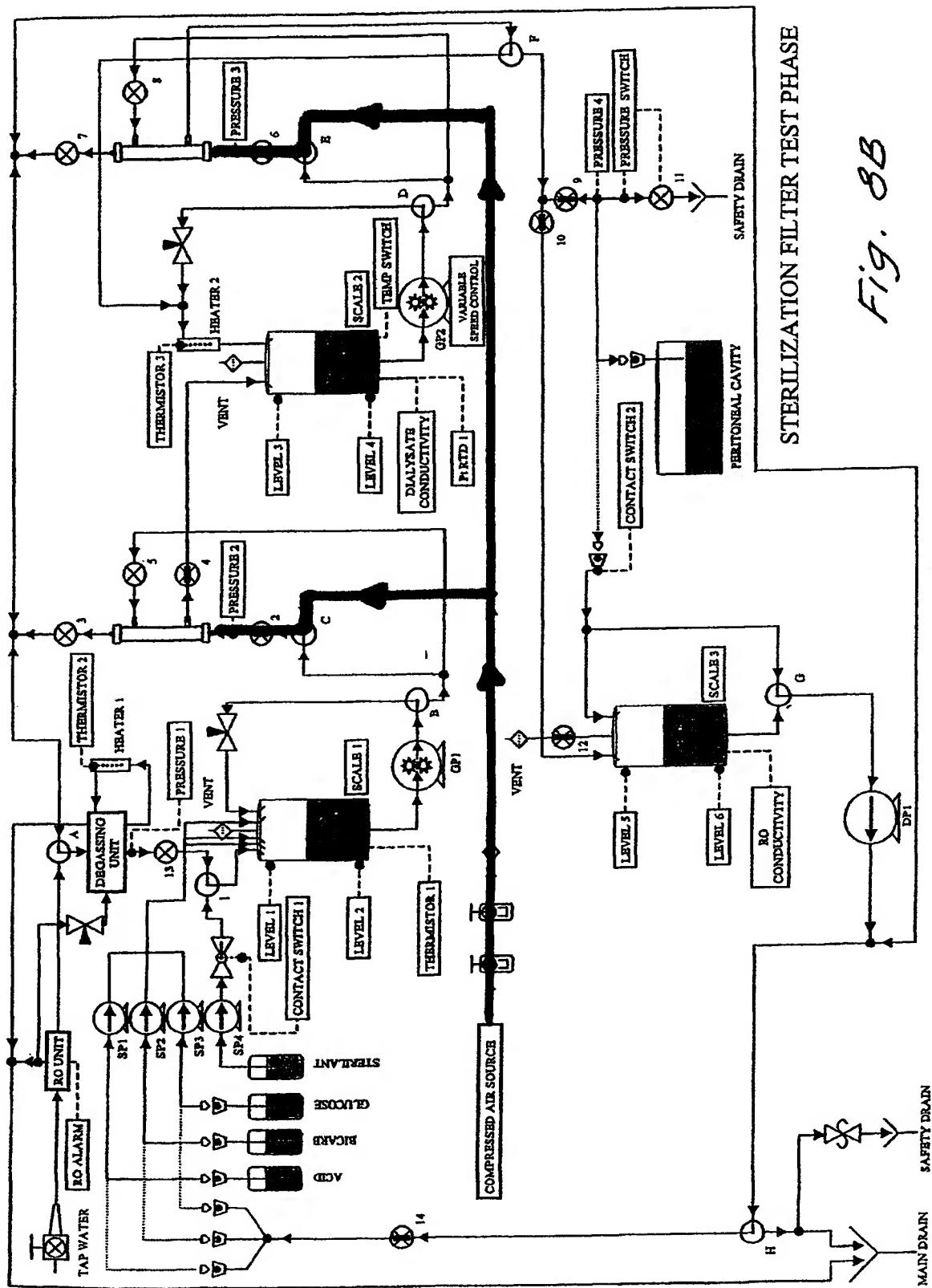


Fig. 8A



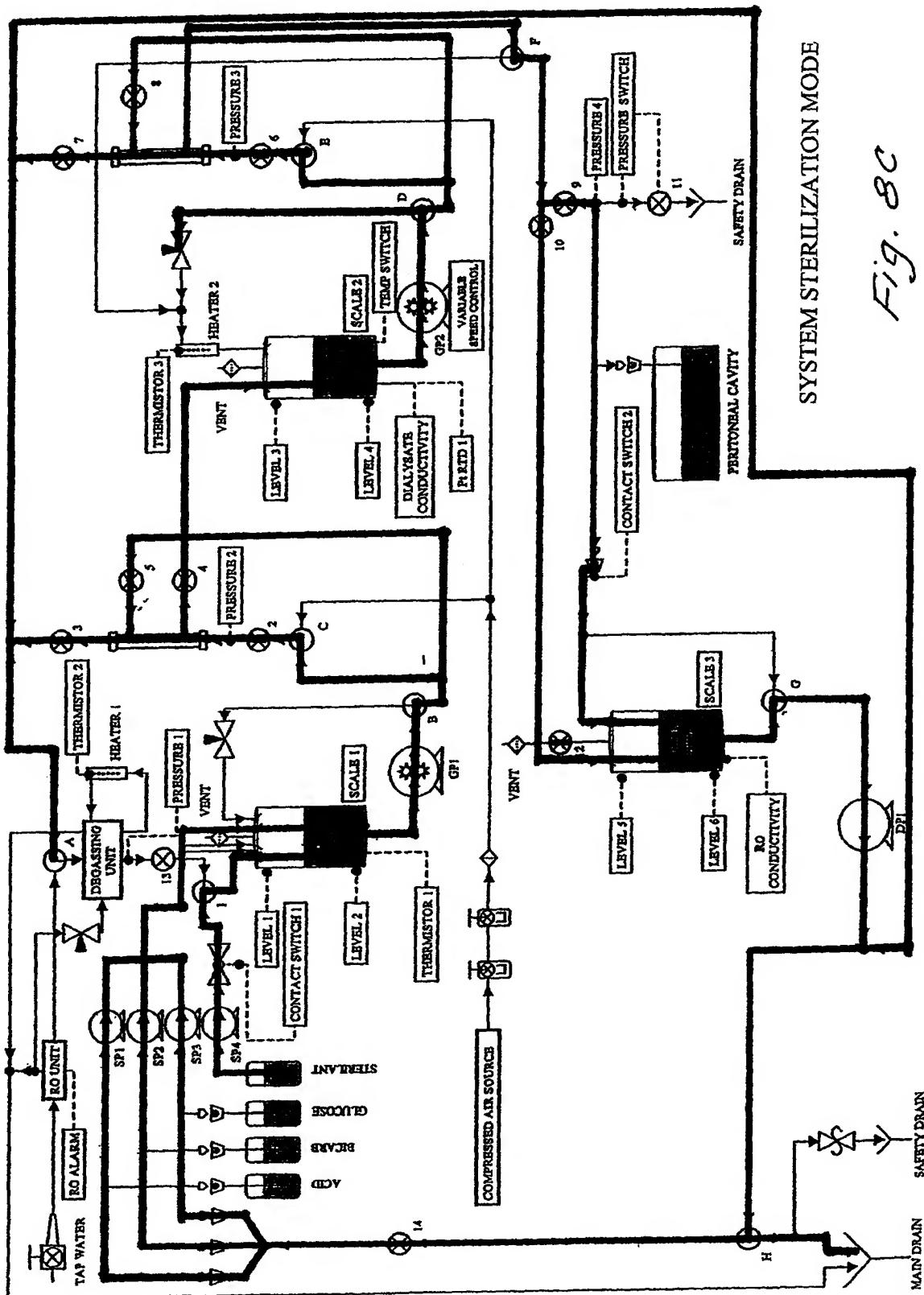


Fig. 8c

U.S. Patent

Jul. 6, 2004

Sheet 12 of 12

6,758,975 B2

